

# Production practices evaluated for organic trailing blackberry

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Organic blackberry production is becoming an important niche market in Oregon, where nearly 50% of conventional and organic blackberries in the U.S. are grown. In the area, trailing blackberry types used for the processed market are most common. A study published in *HortScience* can inform blackberry growers on production practices and recommends management strategies to increase production and profits.

Emily Dixon, Bernadine Strik, and David Bryla evaluated the impacts of cultivar, weed management, primocane training time, and irrigation on plant nutrient status and soil pH, organic matter, and nutrients in a mature trailing [blackberry](#) production system. The study site at the North Willamette Research and Extension Center in Aurora, Oregon, was certified organic and blackberry plants were machine-harvested for the processed market. The scientists assessed 'Marion' and 'Black Diamond' blackberries under nonweeded, hand-weeded, and weed mat management conditions, August and February primocane training times, and two irrigation strategies (continuous summer irrigation and no irrigation after fruit harvest).

The results showed that soil pH, organic matter content, and macronutrient concentrations were affected mainly by year and weed management strategy. "In general, soil under the weed mat had the highest pH, organic matter content, and concentration of several macronutrients," noted Bernadine Strik, corresponding author of the research. "The hand-weeded treatment had lower concentrations of several soil macronutrients than the nonweeded treatment."

Other outcomes revealed that blackberry cultivar had a limited effect on soil macronutrient concentration. Irrigation was found to affect most [soil](#) macronutrients, mostly through interactions with other treatments. The effects of primocane training time were variable. "Training primocanes in August increased the concentration of some nutrients in the aboveground plant, but August training is not recommended in 'Marion' because of the greater risk of cold damage in winter," the authors said.

"The results combined with the increased plant growth, yield, and profit gained from using weed mat rather than hand-weeding or no weeding indicate that weed mat is a very effective management tool in this organic system," the authors said. They recommended further studies designed to assess treatment effects on the below-ground portions of blackberry plants such as crowns and roots.

**More information:** [hortsci.ashspublications.org/content/51/1/36.abstract](https://hortsci.ashspublications.org/content/51/1/36.abstract)

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